

REMARKS

Claims 1-3 and 6-9 are under active prosecution in this application. Claim 1 is the only independent claim under active prosecution.

Claims 1-3 and 6-8 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Patent 6,590,622 to Nakanishi et al. The rejection is traversed.

Claim 1 calls for an anti-reflection structure wherein the sequence of the layers is high-low-high and the first layer of high refractive index is deposited directly onto the substrate.

In contrast, Nakanishi teaches the sequence of low-high-low-high-low with the first layer of low refractive index glued to the substrate by an intervening layer of adhesive.

The Examiner has taken the position that Nakanishi teaches a high-low-high layer sequence within his low-high-low-high-low sequence, and that a layer of high refractive index is deposited on the substrate (irrespective of the intervention of a layer of low refractive index and a layer of adhesive). This argument no longer holds water because claim 1 requires the first layer of high refractive index to be deposited directly onto the substrate.

If, as the Examiner propounds, Nakanishi's layer of adhesive could be omitted (which is directly contrary to Nakanishi's teaching,) the layer deposited directly on the substrate would nevertheless be a layer of low refractive index, not a layer of high refractive index. In all species of his disclosure, Nakanishi teaches low-high-low with the layer adhered to the substrate in all cases being a layer of low refractive index.

The Examiner observes that Nakanishi deposits an ITO layer (18) (of high refractive index) in direct contact with a substrate (17) and that it would therefore be obvious to eliminate the adhesive layer of Nakanishi, because production costs would decrease (an assumption) at the expense of decreased adhesion. Whether this alleged rationale is or is not sustainable (and applicant submits it is not), it remains that in Nakanishi the layer directly on the substrate is still a layer of low refractive index, not high refractive index.

It is submitted that claim 1 distinguishes clearly and patentably over the reference patent to Nakanishi and should be found allowable. Dependent claims 2, 3 and 6-9 should also be found allowable for the same reasons as claim 1 and further by reason of the additional distinguishing limitations set forth in each of them.

Regarding claim 8 as currently amended, it is not seen from the Figures that Nakanishi's conductive layers are openly exposed to air for direct electrical contact. Nakanishi conductive layers, e.g., 14 and 18, are illustrated enclosed in a box and available only for contact with one another. It is submitted that claim 8 distinguishes clearly and patentably over Nakanishi.

Claim 9 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakanishi in view of Patent 5,694,240 to Sternbergh. Sternbergh is relied upon for disclosing that for a structure comprised of alternating layers of materials of high and low refractive index, standard computer models can be used to determine optimum film thicknesses to effect anti-reflection and UV blocking. The Examiner presumes that it would have been obvious to vary the thicknesses of applicant's alternating layers because

it is understood by one of ordinary skill in the art that standard computer models can be used to determine optimal film thicknesses to effect anti-reflection and UV blocking. Sternbergh, though, is directed to anti-reflection and UV blocking for sunglasses, not conductive articles of manufacture having a conductive layer outermost. Sternbergh does not have a conductive layer and there is no reason to add one to his sunglasses. Sternbergh specifically states "...generally, the multilayer coating will not include any layers other than alternating layers 2 and the layers forming composite layer 3..." (col. 3, lines 10-12). Further, Sternbergh does not disclose the specific thicknesses claimed by applicant. In this day and age, it is standard practice to use computer models in the design of products, but that does not detract from the fact that applicant, using a computer, has come up with a specific new and novel design, as claimed in claim 9. If a product is new and novel and non-obvious, it should be patentable no matter how designed or made. As stated in the last sentence of 35 U.S.C. § 103(a):

"Patentability shall not be negated by the manner in which the invention was made."

The Examiner next notes that Nakanishi does not mention the thickness of the ITO layer and then presumes that it would have been obvious to vary the thickness of the ITO layer because it is understood by one of ordinary skill in the art that the layer thickness determines the conductivity of the layer while different conductivities are required for different applications, and because it has been held that discovering an optimal value of a result effective variable involves only routine skill in the art. Again, such generalities fail to detract from the fact that claim 9 specifically defines a complete structure of a conductive article of manufacture that is new and novel. As stated in 35

U.S.C. § 103(a):

“Patentability shall not be negated by the manner in which the invention was made.”

As to Applicant’s claimed optical matching and reflectance of less than 10%, there is nothing in the record that establishes such substantial identity between the prior art and the article specifically claimed in claim 9, as to warrant presuming that the articles taught by the prior art would inherently possess these characteristics. True, Nakanishi uses SiO₂, TiO₂ and ITO, but the stack is low-high-low-high-low; the thicknesses of the layers are not specified; and there is an adhesion layer whose optical characteristics are unknown. There is no clear-cut basis for the Examiner’s presumptions.

Likewise, Applicant’s assertion that “depositing the first high refractive index layer directly onto the substrate improves the optical quality of the article and simplifies the optical matching of the refractive indices” simply states advantages of the present invention over Nakanishi whether those advantages are or are not described in the specification. Anyone following applicant’s teaching will automatically enjoy those benefits. There is no basis for requiring applicant to describe in his specification inherent advantages or any presumed “unexpected results” of his invention. If the advantages are there, they are there.

It is submitted that claim 9 distinguishes clearly and patentably over Nakanishi and Sternbergh and should be found allowable.

Claims 1-3 and 6-8 have also been rejected under 35 U.S.C. § 103(a) as being unpatentable over Patent 3,432,225 to Rock in view of applicant's disclosure. Rock discloses a high-low-high-low coating applied in that order to a substrate. Applicant at pages 1-2 of the specification has described prior art constructs of conductive articles of manufacture, but none suggesting application of an ITO layer to a high-low-high or high-low-high-low coating. The Examiner opines that it would be obvious to apply an outer layer of ITO to the article of Rock as taught by applicant's disclosure. However, there is no teaching (other than applicant's present invention as claimed in claims 1-3 and 6-9) that suggests that addition of an ITO coating to the article of Rock would be feasible or successful or in any way different from the prior art described by applicant. Thus, there would have been, and was, no prevailing reason for adding ITO to Rock. Considering the age of Rock and the highly developed state of the art, it is manifest that the art did not consider Rock a viable candidate for ITO.

It therefore appears that, at best, this rejection is based on hindsight and/or on the premise of being "obvious to try", rather than per se or *prima facie* obvious. Hindsight and "obvious to try" are not legitimate grounds for rejections under § 103. The Examiner is required to establish a *prima facie* case of obviousness.

ACS Hospital Systems v. Montefiore Hospital, 221 U.S.P.Q. 929(Fed. Cir. 1984); *W.L. Gore and Assocs., Inc. v. Garlock, Inc.*, 220 U.S.P.Q. 303(Fed. Cir 1983); *Ex Parte Gould*, 6 U.S.P.Q. 2d 1680, 1684(PTO BPAI 1987); *In re Gordon*, 221 U.S.P.Q. 1125(Fed.Cir 1984); *In re Fine*, 5 U.S.P.Q. 2d 1596, 1596 (Fed. Cir. 1988).

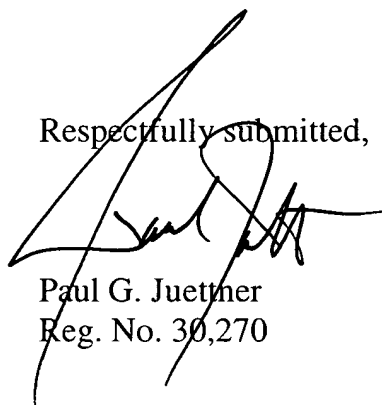
It is therefore requested that this ground of rejection be withdrawn.

Claim 9 has been rejected under 35 U.S.C. § 103(a) as being unpatentable

over Rock in view of applicant's disclosure and further in view of Sternbergh. The rejection is traversed for the reasons set forth immediately above and for the reasons set forth in the foregoing discussion of the rejection of claim 9 as being unpatentable over Nakanishi in view of Sternbergh. Claim 9 distinguishes over the stated ground of rejection.

For the reasons set forth in the foregoing, it is submitted that claims 1-3 and 6-9 distinguish clearly and patentably over the art of record and the stated grounds of rejection and are now in condition for allowance. Reconsideration and allowance of claims 1-9 is respectfully solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Paul G. Juetner', is written over the typed name and registration number.

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